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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/988,241  
Filing Date: November 19, 2001  
Appellant(s): PAILA ET AL.

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Ross A. Dannenberg  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed August 12, 2006 appealing from the Office action mailed October 18, 2005 and Addendum to Appeal Brief filed on January 30, 2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

20020142757	LEUNG	10-2002
6,519,455	MCCORMICK	2-2003
2001/0036834	DAS et al	11-2001

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**Claims 1-4, 9-10, 12-15, 18-19, 23-26, 29-30, 34, 37-40, 43 and 47** are rejected under 35 U.S.C. 102(e) as being anticipated by Leung (2002/0142757)

Regarding claim 1, Leung discloses a method for performing multicast session handover, comprising the steps of

(i) in a first cell, receiving from a base station corresponding to a first cell, a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and a second cell; (0058-0059)

(ii) tuning to a multicast session in the first cell using the received multicast session information; (0059)

(iii) when a predetermined condition occurs, tuning to the multicast session in the second cell using the received multicast session information. (0050)

Regarding claim 2, Leung discloses a computer readable medium, wherein the multicast session information comprises a session identifier and a list of channels in which the multicast session is available. (0059)

Regarding claim 3, Leung discloses method of claim 1, wherein, in step (i), each multicast session information comprises a frequency. (0059)

Regarding claim 4, Leung discloses the method of claim wherein the multicast session information comprises a session title. (0089)

Regarding claim 9, Leung discloses a method for performing multicast session handover, comprising the steps of (i) in a first cell, receiving from a base station

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corresponding to a first cell, a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and a second cell; (0058-0059)

(ii) tuning to a multicast session in the first cell using the received multicast session information; (0059)

(iii) when a predetermined condition occurs, tuning to the multicast session in the second cell using the received multicast session information, wherein, in step (i), the multicast session information comprises link-level access parameters corresponding to the first and second cells, wherein steps (ii) and (iii) comprise using the link-level access parameters to tune to the multicast session in each cell. (0050, 0059, 0087-0088)

Regarding claim 10, Leung discloses the method of claim 1 further comprising the step of joining an IP multicast group in the first cell. (0058-0059)

Regarding claim 12, Leung discloses a mobile terminal, comprising: a processor; and memory for storing computer readable instructions that, when executed by the processor, cause the mobile terminal to perform steps of: (i) in a first cell, receiving from a base station corresponding to a first cell, a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and a second cell; (0058) (ii) tuning to a multicast session in the first cell using the received multicast session information; (0059) (iii) when a predetermined condition occurs, tuning to the multicast session in the second cell using the received multicast session information. (0050,0087-0088)

Regarding claim 13, Leung discloses the method of claim 12 wherein the multicast session information comprises a session identifier and a list of channels in which the multicast session is available. (0059)

Regarding claim 14, Leung discloses the mobile terminal of claim 12, wherein, in step (i), each multicast session information comprises a frequency. (0059)

Regarding claim 15, Leung discloses the method of claim 13 wherein the multicast session information comprises a session title. (0089)

Regarding claim 18, Leung discloses the mobile terminal of claim 12, wherein, in step (i), the multicast session information comprises link-level access parameters corresponding to the first and second cells, and wherein steps (ii) and (iii) comprise using the link-level access parameters to tune to the multicast session in each cell. (0059)

Regarding claim 19, Leung discloses the mobile terminal of claim 12, wherein the computer readable instructions further comprise the step of joining an IP multicast group in the first cell. (0058-0059)

Regarding claim 23, Leung discloses a computer readable medium storing computer readable instructions that, when executed by a processor, cause a data processing device to perform the steps of

(i) in a first cell, receiving from a base station corresponding to a first cell, a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and a second cell; (0058-0059)

(ii) tuning to a multicast session in the first cell using the received multicast session information; (0059 )

(iii) when a predetermined condition occurs, tuning to the multicast session in the second cell using the received multicast session information. (0050, 0087-0088)

Regarding claim 24, Leung discloses the method of claim 23, wherein the multicast session information comprises a session identifier and a list of channels in which the multicast session is available. (0089)

Regarding claim 25, Leung discloses the computer readable medium of claim 23, wherein, in step (i), each multicast session information comprises a frequency. (0059)

Regarding claim 26, Leung discloses the method of claim 23, wherein the multicast session information comprises a session title. (0059)

Regarding claim 29, discloses the computer readable medium of claim 23, wherein, in step (i), the multicast session information comprises link-level access parameters corresponding to the first and second cells, and wherein steps (ii) and (iii) comprise using the link-level access parameters to tune to the multicast session in each cell. (0059)

Regarding claim 30, Leung discloses the method of claim 1, wherein the computer readable instructions further comprise the step of joining an IP multicast group in the first cell. (0058-0059)

Regarding claim 34, Leung discloses a method for performing multicast session handover, comprising steps of:

(i) tuning to a logical announcement channel; (0059 )

(ii) receiving a session announcement corresponding to a multicast session, the session announcement comprising information that maps link-level access parameters in each of a plurality of cells to the multicast session. (0058-0059)

(iii) receiving the multicast session in a first cell using the first cell's received link level access parameters; (0059) and;

(iv) when reception of the multicast session in the first cell changes from a first signal strength, receiving the multicast session in a second cell using link-level access parameters contained in the session announcement. (0050,0087-88)

Regarding claim 37, Leung discloses a mobile terminal, comprising: a processor; and memory for storing computer readable instructions that, when executed by the processor, cause the mobile terminal to perform steps of: (i) wirelessly receiving from a base station corresponding to a first cell, a broadcast message communicating multicast session information for the first cell and multicast information for a second cell; (0058-0059) (ii) wirelessly tuning to a multicast session broadcast by the base station corresponding to the first cell using the received multicast session information for the first cell; (0059) (iii) when a predetermined condition occurs, wirelessly tuning to a corresponding multicast session broadcast by a base station corresponding to the second cell using the received multicast session information for the second cell. (0050, 0087-88)

Regarding claim 38, Leung discloses the terminal of claim 1, wherein each multicast session information comprises a session identifier and a list of channels in which the multicast session is available. (0059)



Regarding claim 39, Leung discloses the mobile terminal of claim 37, wherein, in step (i), each multicast session information comprises a frequency. (0059)

Regarding claim 40, Leung discloses a mobile terminal of claim 37, wherein, each multicast session information comprises a session title. (0089)

Regarding claim 43, Leung discloses the mobile terminal of claim 37, wherein, in step (i), each multicast session information comprises link-level access parameters to tune to the multicast session in each respective cell. (0059)

Regarding claim 47, Leung discloses a method for performing multicast session handover, comprising, prior to determining that a handoff from a first cell to a second cell should be made for a mobile terminal located in the first cell, transmitting from a base station corresponding to the first cell a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and the second cell. (0087-0088)

**Claims 5-6, 11, 20-22, 31-33 and 44-46** are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung in view of McCormick (US 6,519,455).

Regarding claim 5, Leung discloses method of claim 1, but does not expressly disclose handoff due to signal fading. McCormick wherein a predetermined condition for broadcast handoff comprises a signal strength fading. (Col. 7 line 17-36; Col. 8 lines 5-32). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to change base stations when a signal fades in order to continue a session without it being interrupted or dropped due to loss of signal.

Regarding claim 6, Leung discloses the computer readable medium of claim 1, but does not disclose that a predetermined condition comprises receiving predetermined user input. McCormick discloses a mobile terminal, wherein a predetermined condition comprises receiving predetermined user input. (Col. 6 lines 17-29) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to handoff based on user input to give a user more control in system selection.

Regarding claim 11, Leung discloses the method of claim 1, but does not expressly disclose periodic broadcast while tuned to the first session. McCormick discloses a system wherein the computer readable instructions further comprise the step of periodically receiving session announcements while tuned to the session in the first cell. (Col. 5 line 36-62) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to periodically receive multicast session announcements while tuned to the multicast session in the first cell in order to inform the users of other broadcasts or new broadcast that become available.

Regarding claim 20, Leung discloses the mobile terminal of claim 12, but does not expressly disclose periodic broadcast while tuned to the first session. McCormick discloses a system wherein the computer readable instructions further comprise the step of periodically receiving session announcements while tuned to the session in the first cell. (Col. 5 line 36-62) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to periodically receive multicast session

announcements while tuned to the multicast session in the first cell in order to inform the users of other broadcasts or new broadcast that become available.

Regarding claim 21, Leung discloses a terminal, but does not expressly disclose handoff due to signal fading. McCormick wherein a predetermined condition for broadcast handoff comprises a signal strength fading. (Col. 7 line 17-36; Col. 8 lines 5-32). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to change base stations when a signal fades in order to continue a session without it being interrupted or dropped due to loss of signal.

Regarding claim 22, Leung discloses the method of claim 12 but does not expressly disclose a predetermined user input for handover. McCormick discloses a mobile terminal, wherein a predetermined condition comprises receiving predetermined user input. (Col. 6 lines 17-29) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to handoff based on user input to give a user more control in system selection.

Regarding claim 31, Leung discloses the computer readable medium of claim 23, but does not expressly disclose periodic broadcast while tuned to the first session. McCormick discloses a system wherein the computer readable instructions further comprise the step of periodically receiving session announcements while tuned to the session in the first cell. (Col. 5 line 36-62) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to periodically receive multicast session announcements while tuned to the multicast session in the first cell in order to inform the users of other broadcasts or new broadcast that become available.

Regarding claim 32, Leung discloses a computer readable medium, but does not expressly disclose handoff due to signal fading. McCormick wherein a predetermined condition for broadcast handoff comprises a signal strength fading. (Col. 7 line 17-36; Col. 8 lines 5-32). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to change base stations when a signal fades in order to continue a session without it being interrupted or dropped due to loss of signal.

Regarding claim 33, Leung does not expressly disclose user input for handoff. McCormick discloses a computer readable medium, wherein in step (iii) the predetermined condition comprises receiving predetermined user input. (Col. 6 lines 17-29) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to handoff based on user input to give a user more control in system selection.

Regarding claim 44, Leung discloses the mobile terminal of claim 37, but does not expressly disclose periodic broadcast while tuned to the first session. McCormick discloses a system wherein the computer readable instructions further comprise the step of periodically receiving session announcements while tuned to the session in the first cell. (Col. 5 line 36-62) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to periodically receive multicast session announcements while tuned to the multicast session in the first cell in order to inform the users of other broadcasts or new broadcast that become available.

Regarding claim 45, Leung discloses a terminal, but does not expressly disclose handoff due to signal fading. McCormick wherein a predetermined condition for

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broadcast handoff comprises a signal strength fading. (Col. 7 line 17-36; Col. 8 lines 5-32). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to change base stations when a signal fades in order to continue a session without it being interrupted or dropped due to loss of signal.

Regarding claim 46, Leung does not expressly disclose user input for handoff. McCormick discloses a computer readable medium, wherein a predetermined condition for handoff comprises receiving predetermined user input. (col. 6 lines 17-29) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to handoff based on user input to give a user more control in system selection.

**Claims 7, 16, 27, 35 and 41** are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung in view of Examiner's Official notice.

Regarding claim 7, Leung discloses the method of claim 1 but does not expressly disclose that in steps (ii) and (iii) comprise receiving a digital video broadcast terrestrial (DVB-T) multicast session. Examiner takes official notice that DVB-T is a well-known and standard type of broadcast. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use DVB-T as a multicast format to insure standard operation and system interoperability.

Regarding claim 16, Leung discloses the method of claim 12 but does not expressly disclose that steps (ii) and (iii) comprise receiving a digital video broadcast terrestrial (DVB-T) multicast session. Examiner takes official notice that DVB-T is a well known and standard type of broadcast. Therefore it would have been obvious to one of

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ordinary skill in the art at the time of the invention to use DVB-T as a multicast format to insure standard operation and system interoperability. Examiner takes official notice that DVB-T is a well known and standard type of broadcast. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use DVB-T as a multicast format to insure standard operation and system interoperability.

Regarding claim 27, Leung discloses the method of claim 23 but does not expressly disclose that steps (ii) and (iii) comprise receiving a digital video broadcast terrestrial (DVB-T) multicast session. Examiner takes official notice that DVB-T is a well known and standard type of broadcast. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use DVB-T as a multicast format to insure standard operation and system interoperability.

Regarding claim 35, Leung discloses the method of claim 34 but does not expressly disclose that steps (iii) and (v) comprise tuning to a digital video broadcast terrestrial (DVB-T) multicast session. Examiner takes official notice that DVB-T is a well known and standard type of broadcast. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use DVB-T as a multicast format to insure standard operation and system interoperability.

Regarding claim 41, Leung discloses the method of claim 37 but does not expressly disclose that wherein steps (ii) and (iii) comprise wirelessly receiving a digital video broadcast terrestrial (DVB-T) multicast session. Examiner takes official notice that DVB-T is a well known and standard type of broadcast. Therefore it would have been

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obvious to one of ordinary skill in the art at the time of the invention to use DVB-T as a multicast format to insure standard operation and system interoperability.

**Claims 8, 17, 28, 36 and 42** are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung in view of Das et al.

Regarding claim 8, Leung discloses the method of claim 1, wherein steps (ii) and (iii) comprise receiving a multicast session, but does not disclose UMTS. Das discloses a system with multicast handover that may be implemented in UMTS. (Paragraphs 0004, 0012) Therefore it would have been obvious to one of ordinary skill in the art to implement a multicast handover method using UMTS, as UMTS is well known to be a developing standard that will support multimedia applications where multicast will be used.

Regarding claim 17, Leung discloses the mobile terminal of claim 12, wherein steps (ii) and (iii) comprise receiving a multicast session, but does not disclose UMTS. Das discloses a system with multicast handover that may be implemented in UMTS. (Paragraphs 0004, 0012) Therefore it would have been obvious to one of ordinary skill in the art to implement a multicast handover method using UMTS, as UMTS is well known to be a developing standard that will support multimedia applications where multicast will be used.

Regarding claim 28, Leung discloses the computer readable medium of claim 23, wherein steps (ii) and (iii) comprise receiving a multicast session, but does not disclose UMTS. Das discloses a system with multicast handover that may be implemented in

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UMTS. (Paragraphs 0004, 0012) Therefore it would have been obvious to one of ordinary skill in the art to implement a multicast handover method using UMTS, as UMTS is well known to be a developing standard that will support multimedia applications where multicast will be used.

Regarding claim 36, Leung discloses the method of claim 34, wherein steps (iii) and (v) comprise tuning to a multicast session, but does not disclose UMTS. Das discloses a system with multicast handover that may be implemented in UMTS. (Paragraphs 0004, 0012) Therefore it would have been obvious to one of ordinary skill in the art to implement a multicast handover method using UMTS, as UMTS is well known to be a developing standard that will support multimedia applications where multicast will be used.

Regarding claim 42, Leung discloses the mobile terminal of claim 37, wherein steps (ii) and (iii) comprise wirelessly receiving a multicast session, but does not disclose UMTS. Das discloses a system with multicast handover that may be implemented in UMTS. (Paragraphs 0004, 0012) Therefore it would have been obvious to one of ordinary skill in the art to implement a multicast handover method using UMTS, as UMTS is well known to be a developing standard that will support multimedia applications where multicast will be used.



### **(10) Response to Argument**

1. Please note that the prior art is misidentified in the heading of item 1, and on further repeated occurrences, which should refer to LEUNG, not LEON, as no LEON reference is of record.

Regarding claims 1-4, 9, 10, 12-15, 18, 19, 23-26, 29, 30, 34,37-40,43 and 47, Paragraphs 0087-0089 describe the overhead information which expressly includes **neighbor cell** information for soft handoff including PN offset information for a neighbor cell, which would read as a link-level access parameter. Further is repeatedly indicated that a session identifier is provided for a particular broadcast session, not for one particular base station or cell. Therefore applicant's arguments are not persuasive, as they hinge on this supposed lack of this teaching.

Looking specifically at 47, the broadest independent claim, it only requires that prior to handoff a base station broadcasts multicast session information for a first cell and a second cell, and this is clearly described in the cited portion (paragraphs 0087-0088).

Applicant makes the assertion that the only description of overhead information is contained in paragraphs 0083-0084, however, this is inaccurate and as it is only part of the text describing the overhead which as described above discloses information for multiple cells as described in paragraphs 0087-0089, wherein at least a neighbor pilot PN sequence offset index and a neighbor pilot Forward Broadcast Supplemental Channel Code Channel index and specifically that, "The NGHBR\_FBSCH\_CODE\_CHAN is the neighbor pilot Forward Broadcast Supplemental

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Channel Code Channel Index. If the NGHBR\_FBSCH\_CODE\_CHAN\_INC- L field is set to `0`, the base station omits this field; otherwise, the base station includes this field and the BS sets this field to the code channel index that the mobile station is to use on this Forward Broadcast Supplemental Channel on this neighbor.” Clearly indicating information from the first base station that is to be used by the mobile in a multicast session with a neighboring base station. This contradicts applicants out of context definition of the overhead content which applicant admits is supplied by the first base station in Leung.

The remainder of applicant’s arguments address the arguments against the rejection of claim 1 as they relate to the other independent claims, and are therefore unpersuasive on the same grounds.

2. Arguments in this section merely state that they do not remedy supposed deficiencies with respect to the independent claims that have been addressed above, and are therefore not persuasive.

3. Arguments in this section merely state that they do not remedy supposed deficiencies with respect to the independent claims that have been addressed above, and are therefore not persuasive.

4. Arguments in this section merely state that they do not remedy supposed deficiencies with respect to the independent claims that have been addressed above, and are therefore not persuasive.

#### **(11) Related Proceeding(s) Appendix**

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No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Sonny TRINH/

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